

**REMARKS**

Claims 1-21 are all the claims pending in the application<sup>1</sup>; claims 1, 10 and 11 are rejected; claims 2-3 are objected to; claims 4-9 and 12-21 have been withdrawn from consideration.

For purposes of advancing prosecution, claims 1 and 9 have been amended in accordance with the positions articulated by the Examiner.

No new matter has been added and entry of the amendment is respectfully requested.

**I. Restriction Requirement**

On February 7, 2006, Applicants elected with traverse, Group I (claims 1-5 and 10-11) drawn to an isolated polypeptide cellulase, and the polypeptide of SEQ ID NO:3. On April 10, 2006, Applicants requested rejoinder of the non-elected claims, arguing that the claims, at least as amended on April 10<sup>th</sup>, are linked by a special technical feature -- the novel polypeptide of SEQ ID NO:1 (a cellulase that is resistant to surfactants).

The Examiner has maintained the position that the claims lack a special technical feature, and thus, continue to lack unity of invention and the restriction is proper. It is stated specifically that Applicants' arguments submitted in this regard are not found persuasive because the amendment "does not change core point that a polypeptide comprising SEQ ID NO: 1 with a plurality of amino acids deleted from the N-terminus of said polypeptide (part (e)) i.e. more than one amino acids deleted from the N-terminus of said polypeptide and SEQ ID NO: 1 results in

---

<sup>1</sup> Applicants respectfully note that the Examiner appears to have improperly listed only claims 1-3, 10 and 11 on the October 11, 2006 Office Action Summary sheet as pending in the application. The status of the claims should be: claims 1-21 pending, claims 4-9 and 12-21 withdrawn; claims 1, 10 and 11 rejected and claims 2-3 objected to.

the lack of specific structure of the claimed polypeptide, which could be a protein comprising any fragment of SEQ ID NO:1, and such a protein and fragments are disclosed in WO01/90375, which is therefore known in the art.”

Accordingly, included herewith is an amendment to claims 1 and 9 such that element (e) of each of said claims has been deleted. Applicants respectfully request rejoinder of the non-elected claims, upon allowance of claim 1, as claims 4-9 and 12-21 have a special technical feature in that each of said claims presently encompasses a novel cellulase that is resistant to surfactants.

## **II. Claim Rejection - 35 U.S.C. §112**

**A.** Claims 1 and 10-11 remain rejected under 35 U.S.C. §112, first paragraph, as allegedly lacking adequate written description support in the specification.

The Examiner states that claim 1 is directed to a genus of modified or variant polypeptides having “a plurality of amino acids deleted from the N-terminus of said polypeptide” (i.e., SEQ ID NO:1) in element (e). The Examiner notes that there is no recitation of distinguishing attributes for the genus, such as the number of amino acids that may be deleted, the identity of the resulting fragments, and a recitation of the activity of the fragments. The Examiner concludes that claim 1 lacks recitation of the structure and function of the claimed genus.

In view of the above-noted deletion of element (e) from claim 1, the rejection under 35 U.S.C. §112, first paragraph for alleged inadequate written description is believed to now be moot. Applicants respectfully request reconsideration and withdrawal of this rejection.

**B.** Claims 1 and 10-11 remain rejected under 35 U.S.C. §112, first paragraph, as allegedly being non-enabled.

In the Examiner's view, claim 1 provides no limits on the number of deletions that might be made to SEQ ID NO:1, and the claims are not enabled for the large number of mutant polypeptides encompassed by the claims.

In view of the deletion of element (e) from claim 1, the rejection under 35 U.S.C. §112, first paragraph for alleged nonenablement is now believed to be moot. Applicants respectfully request reconsideration and withdrawal of this rejection.

### **III. Claim Rejection - 35 U.S.C. §102**

At page 7 of the Office Action, claims 1 and 10-11 remain rejected under 35 U.S.C. §102 as being anticipated by Murashima et al. (WO 01/90375; published November 29, 2001).

The Examiner states that Murashima discloses a modified polypeptide (SEQ ID NO:1) having 223 amino acids, which is 100% identical to the polypeptide of SEQ ID NO:1 recited in pending claim 1, and 98.8% identical to the polypeptide of SEQ ID NO:3 and having cellulase activity but notes that Murashima does not disclose either of the substitutions at amino acid 162 and 166 of the present claims.

The Examiner notes that element (e) of claim 1 recites a polypeptide comprising the polypeptide of SEQ ID NO:1 having an undefined number of amino acid deletions from the N-terminus. The Examiner further notes that the polypeptide of Murashima is identical at positions 185-223 to positions 167-205 of SEQ ID NO:1<sup>2</sup>. The Examiner concludes that Murashima

---

<sup>2</sup> Applicants respectfully note that while the Examiner refers to positions 167-223 of Murashima as being identical to positions 167-223 of SEQ ID NO:3, these positions do not overlap. It appears that ... (footnote continued)

teaches a polypeptide (SEQ ID NO:1 of Murashima) that comprises the polypeptide of SEQ ID NO:1 (of the present application) having a plurality of amino acid deletions (184) from the N-terminus.

Because Murashima fails to disclose either of the two recited substitutions (at amino acids 162 and 166 of SEQ ID NO:1) and because element (e) has been deleted from claim 1, Murashima cannot be said to teach each and every limitation of the amended claims. Applicants respectfully request reconsideration and withdrawal of this rejection.

#### **IV. Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

---

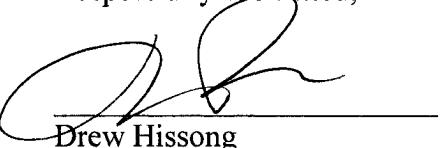
the Examiner intended to refer to positions 185-223 of Murashima, and positions 167-205 of SEQ ID NO:1.

AMENDMENT UNDER 37 C.F.R. 1.116  
U.S. Appln. No. 10/533,310

Q87626

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Drew Hissong  
Registration No. 44,765

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE  
23373  
CUSTOMER NUMBER

Date: January 11, 2007